Level 1(Loops & if)

1. Factors of number

Write a program to find factors of given number

Input Format:

First line consists of a positive integer n

Output Format:

Print the space separated integer factors of given number

Sample Input:

20

Sample Output:

1 2 4 5 10 20

2. Count factors of number

Write a program to count factors of given number

Input Format:

First line consists of a positive integer n

Output Format:

Print the integer count.

Sample Input:

20

Sample Output:

6

3. Prime Number

Write a program to find whether the given number is a prime number or not.

Input Format:

First line consists of a positive integer n

Output Format:

Print Yes if the number is prime, else print No

Sample Input:

11

Sample Output:

Yes

4. Common Factors

Write a program to find common factors of given 2 integers.

Input Format:

First line contains space separated three integer input n,m.

Output Format:

Print space separated common factors of 2 numbers.

Sample Input:

10 20

Sample Output:

1 2 5 10

5. Greatest Common Factor

Write a program to find the greatest common factor of given 2 integers.

Input Format:

First line contains space separated three integer input n,m.

Output Format:

Print greatest common factor of 2 numbers.

Sample Input:

10 20

Sample Output:

10

6. Lowest Common Factor

Write a program to find the lowest common factor of given 2 integers.

Input Format:

First line contains space separated three integer input n,m.

Output Format:

Print lowest common factor of 2 numbers.

Sample Input:

10 20

Sample Output:

1

7. **Lowest Common Factor Excluding 1 and 2**

Write a program to find the lowest common factor of given 2 integers.

Input Format:

First line contains space separated three integer input n,m.

Output Format:

Print lowest common factor of 2 numbers excluding 1 and 2

Sample Input:

10 20

Sample Output:

5

8. Common Multiples

Write a program to print common multiples of 2 numbers till n

Input Format:

First line contains a single integer input n.

Second line contains space separated 2 integer input a,b.

Output Format:

Print first **n** common multiples of a and b.

Sample Input:

9

3 4

Sample Output:

12 24 36 48 60 72 84 96

9. Least Common Multiple

Write a program to print least common multiple of 2 numbers

Input Format:

First line contains space separated 2 integer input a,b.

Output Format:

Print least common multiple of a and b.

Sample Input:

8 12

Sample Output:

24

10. Sum of n natural numbers

Write a program to find sum of first N natural numbers

Input Format:

First line contains a single integer input n.

Output Format:

Print sum of n natural numbers

Sample Input:

100

Sample Output:

5050